



EPA Region 5 Records Ctr.



229699

August 10, 2004

Mr. Nabil S. Fayoumi  
U. S. EPA - Region 5  
77 West Jackson Boulevard (SR-6J)  
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order  
(UAO) Groundwater Operable Unit  
Monthly Report; July 1 - July 31, 2004 Reporting Period**

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period July 1 – July 31, 2004.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven D. Smith".

Steven D. Smith  
Project Coordinator

cc: Ken Bardo, - U. S. EPA  
Mayor Sauget - Sauget, IL  
Sandra Bron – IEPA  
Mike Coffey - USFWS  
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)  
Mayor Frank Bergman – Cahokia  
L. Glen Kurowski - Monsanto  
Cathleen Bumb – Solutia  
Richard Williams – Solutia

## **Sauget Area 2 Site - Sauget, Illinois**

### **October 3, 2002 UAO – Groundwater Operable Unit**

#### **Status Report**

**Date of Report:** August 10, 2004  
**Period Covered:** July 1 - July 31, 2004

#### **Agency Actions / Communications**

*In an e-mail message dated June 19, 2003, U. S. EPA requested the submission of revised versions of the Focused Feasibility Study, the Remedial Design Work Plan, and the Pre-Final (95%) Remedial Design. The revisions were required to allow the use of a slurry wall rather than jet grouting for construction of the barrier wall. The revised documents were submitted on July 3, 2003. The ESD was issued by US EPA on July 30, 2003. The Final Design Submittals were approved by EPA on October 16, 2003.*

#### **Work Performed During the Reporting Period**

##### **Slurry Wall**

- Total excavation through July 31, 2004 = 337,787 sq ft. This represents approximately 75 percent of the total excavation required to complete the slurry wall.
- Total backfill placed through July 31, 2004 = 263,901 sq ft. This represents 59 percent of the total volume of backfill required to construct the slurry wall.
- Cleaning and backfilling of the trench continued through the month of July, with approximately 5,100 cubic yards of new backfill being placed in the south leg of the trench during the month.
- By the end of the month, excavation of the southern leg of the wall had been completed and all but approximately 700 cubic yards of the leg had been backfilled. The hydraulic clamshell was moved to the northwestern portion of the site to join the Koehring 1266 backhoe in excavating this portion of the wall. By the end of July, the backhoe had completed as much of the excavation as space in the corner would allow and the hydraulic clam had excavated trench panels to within 50 feet of the corner.

- The only utility along the north leg of the slurry wall that remains to be relocated is a stormwater culvert at the extreme eastern end of the north leg of the wall. That culvert will be relocated by the second week of August.
- Slurry de-sanding continued during the month, with the result that the sand content of the deep slurry in the trench decreased from 20 percent or more to an average of approximately 15 percent.
- Slurry was pumped from the south leg to the temporary slurry holding pond on top of the landfill and was then pumped to the north side of the site for reuse in the excavation at the northwestern corner. However, at the end of the month, the slurry remaining in the south leg of the trench had become very viscous and was proving very difficult to pump. Pumping of this material will be discontinued during the first week of August and the remaining slurry will be removed with a backhoe. Some of it will be used to mix backfill, while the rest will be transported to the temporary stockpile on the top of the landfill for future stabilization.
- The second hydraulic clamshell is expected to be put into service during the first week of August.
- A night shift was started on July 13<sup>th</sup>. Working hours are currently 6.00 am to 5.30 pm for the day shift and 6.00 pm to 5.30 am for the night shift. The only activity during the night shift is excavation with one hydraulic clam.
- During the night shift on July 19<sup>th</sup>, clean slurry escaped from the work area through a break in the slurry transfer pipeline. Most of the slurry was contained within the runoff berms enclosing the exclusion zone; however, some did flow over the berm towards the river bank. No slurry flowed down the bank into the river and the spilled slurry, together with the underlying soil, was removed from the area outside the berm by July 23<sup>rd</sup>.
- All QA/QC tests satisfied the project specifications during the reporting period.

### **Groundwater Treatment**

- Pumping rates for the groundwater extraction system were set in accordance with the lookup tables provided in the ROD and the final design for the “no-wall” condition. This resulted in the groundwater discharge to the river being controlled by the system during the entire month.
- Effluent pumping data for each well are attached.
- Piezometer and pumping data are being forwarded to the Agencies weekly.
- All three of the pumping wells were shut down for approximately four hours on July 30<sup>th</sup> at the request of the POTW. Control of groundwater discharge to the river was maintained during the shutdown period and the pre-shutdown piezometric levels were re-established very shortly after the pumps were restarted.

- A new permit for discharge of the extracted groundwater to the American Bottoms treatment facility was received at the end of July.

### **Schedule**

Since the last schedule was submitted to the Agencies in April, working hours at the site have increase from one 10 hour shift per day to two 11 hour shifts per day. In addition, it is expected that a second hydraulic clamshell will begin excavation during the first week of August. Because of these changes, a new schedule is being prepared and will be submitted to the Agencies during the next reporting period.

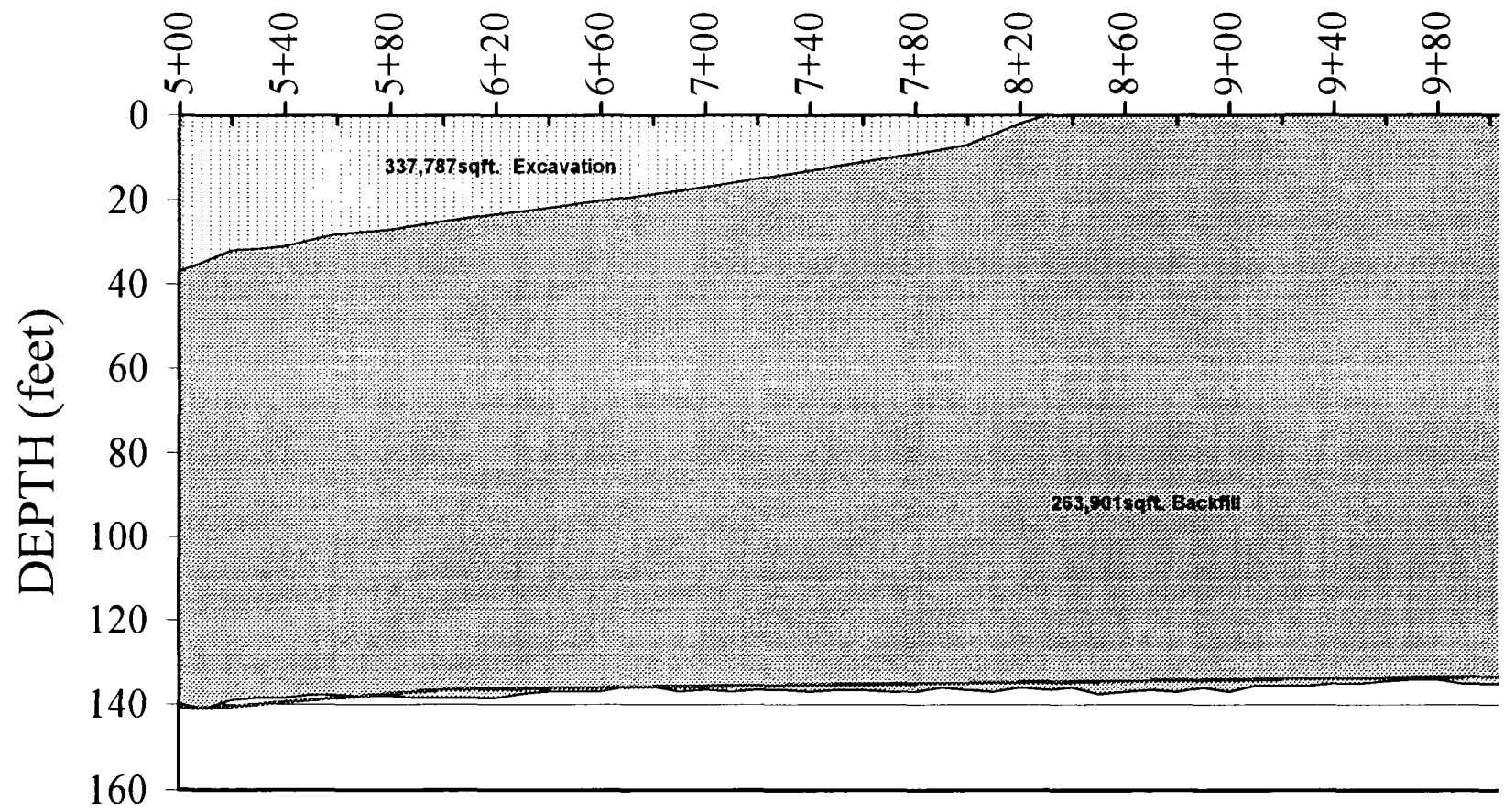
### **Submittals in July**

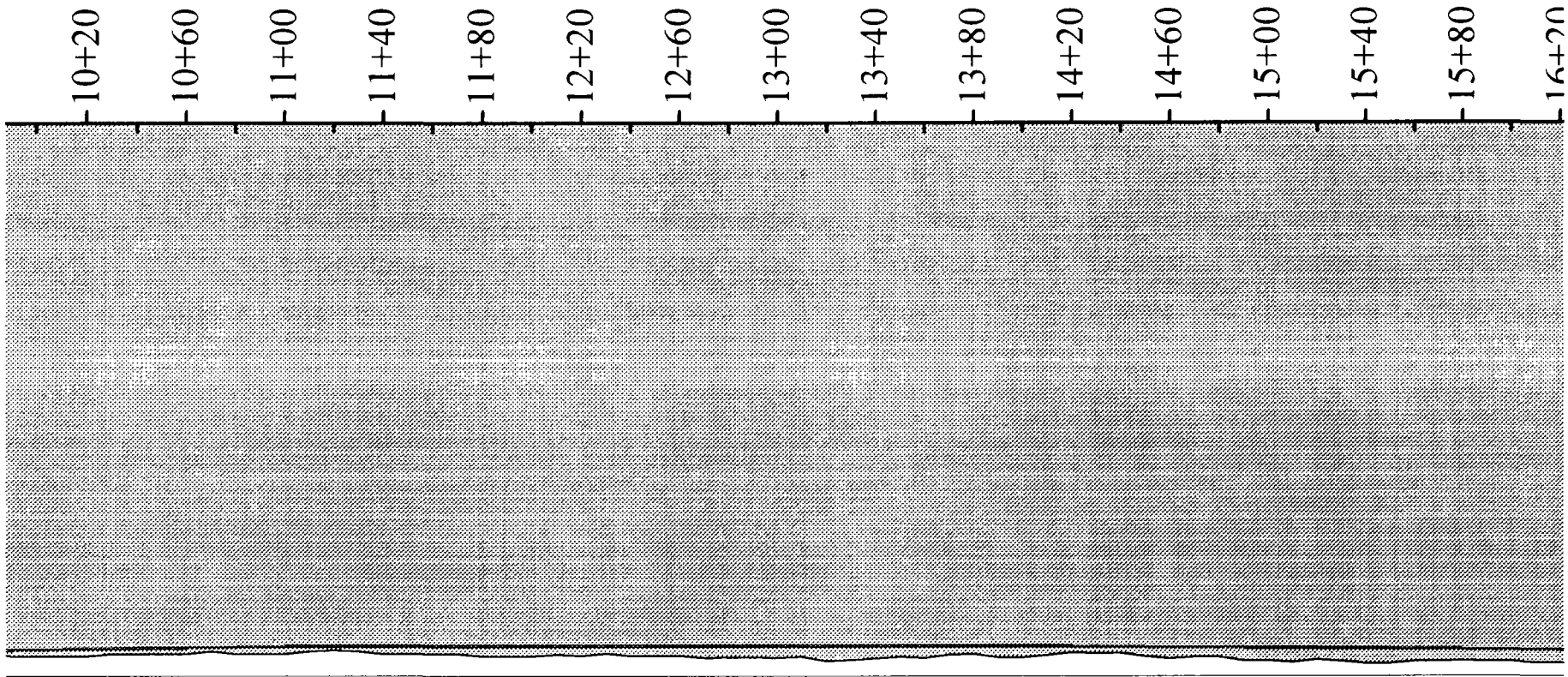
A report on the slurry leakage from the transfer pipeline was submitted to the Agencies on July 22<sup>nd</sup>.

### **Work Scheduled for Next Reporting Period**

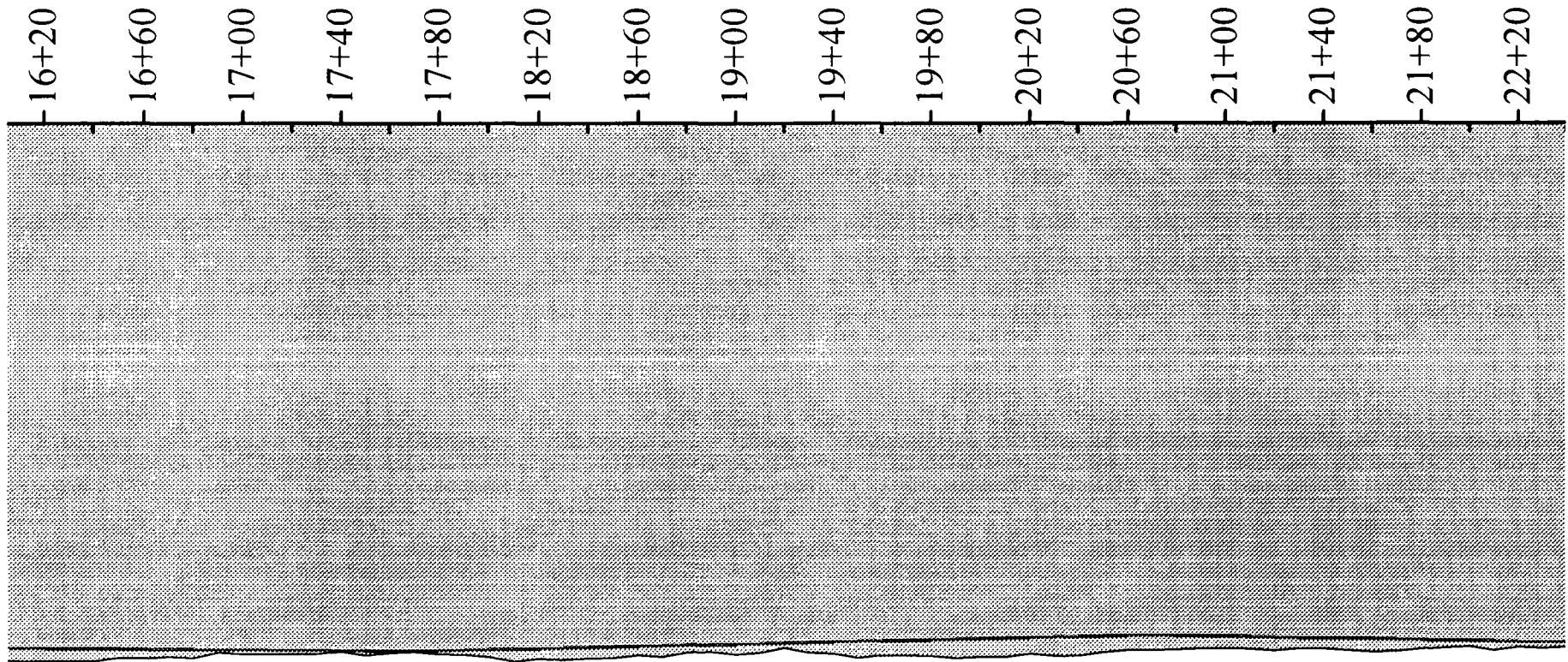
- Continue pumping and treating groundwater based the ROD. Flow rates computed for the “no-wall” condition will be used.
- Continue excavating the remaining section of the north-south leg in the northwestern corner of the site and begin excavating the northern leg of the slurry trench.
- Continue cleaning and backfilling the trench.
- Construct a new access road on the northern side of the site to replace the current access along Riverview Avenue..
- Relocate stormwater culvert.
- Begin de-sanding slurry in the northern portion of the excavation.
- Begin excavating with the second hydraulic clamshell.
- Prepare a revised schedule and submit to Agencies.

## **SLURRY WALL PROFILE**





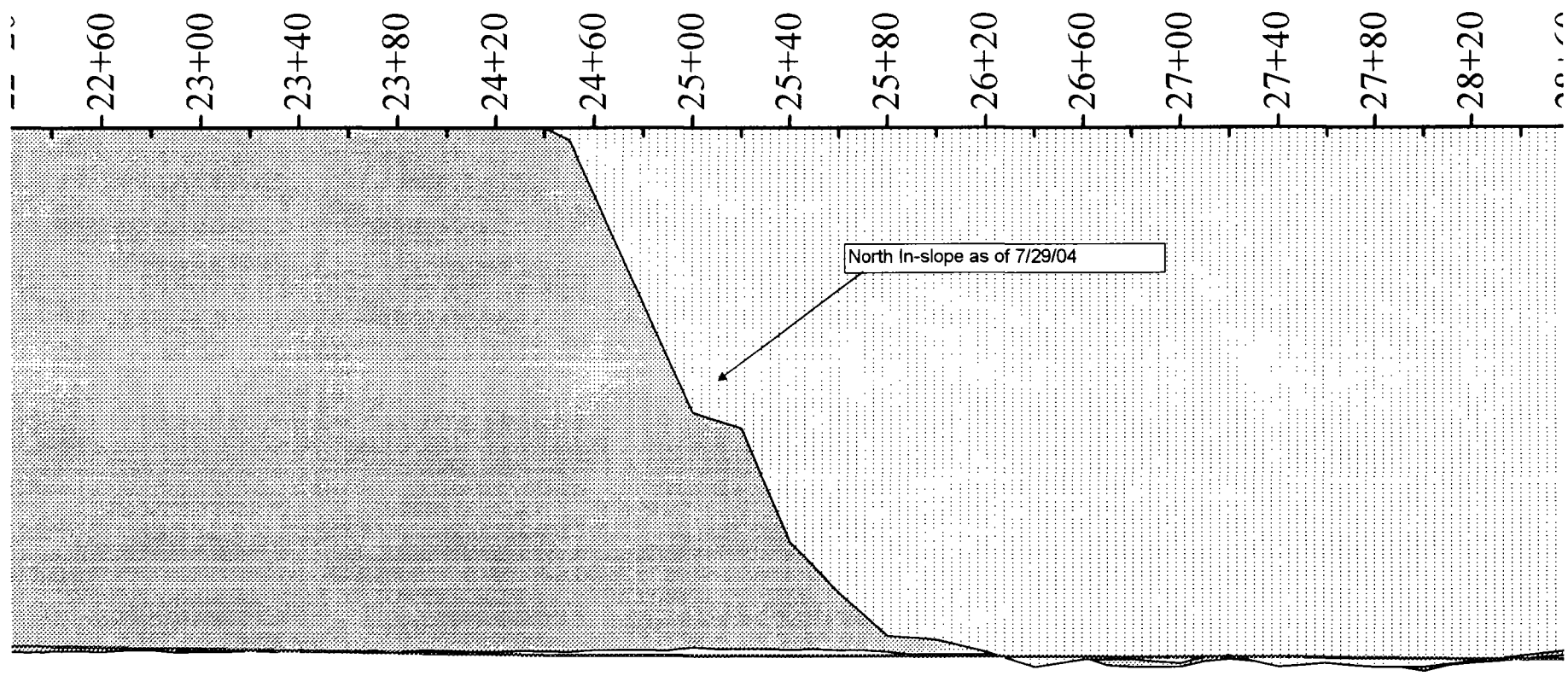
# SURVEY STATIONS



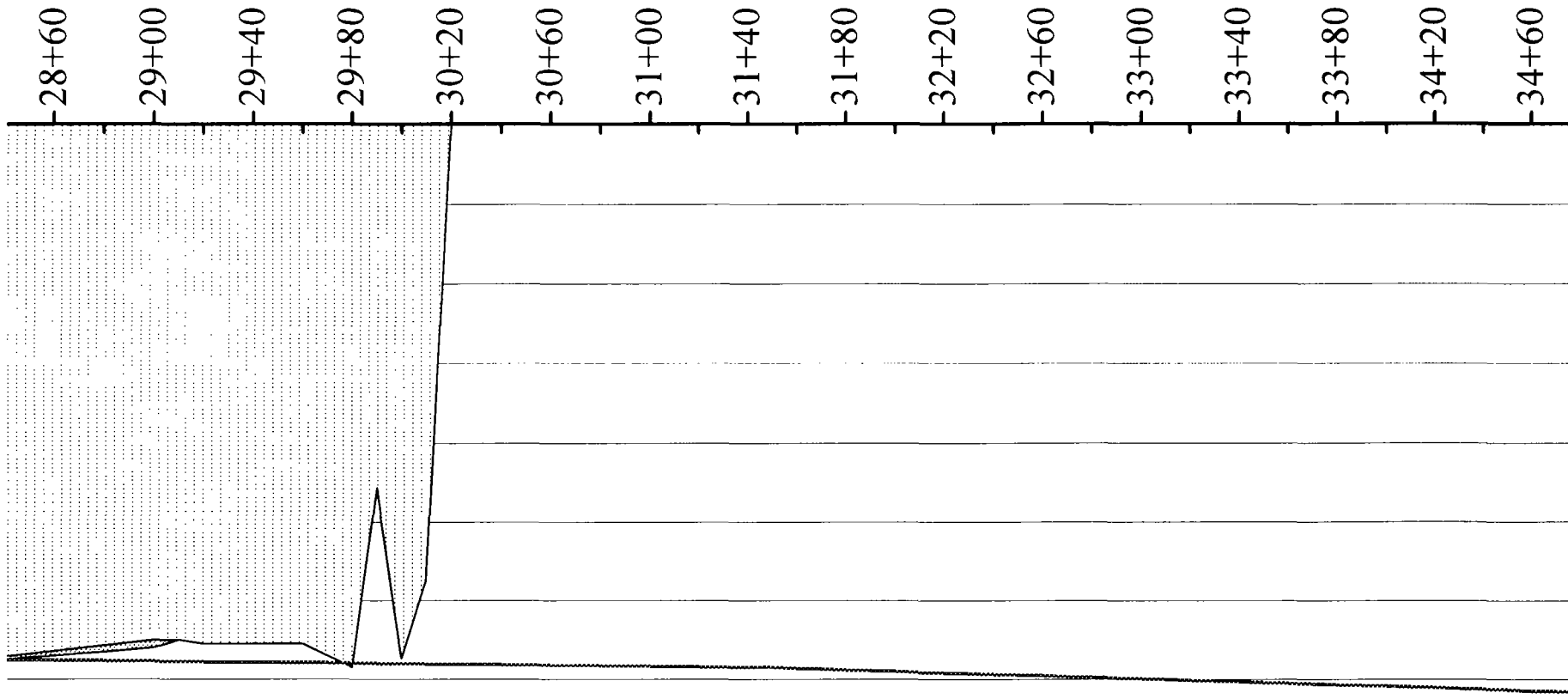
■ Backfill Area as of 7/27/04 ■ Excavation Area □ Existing Ground Line

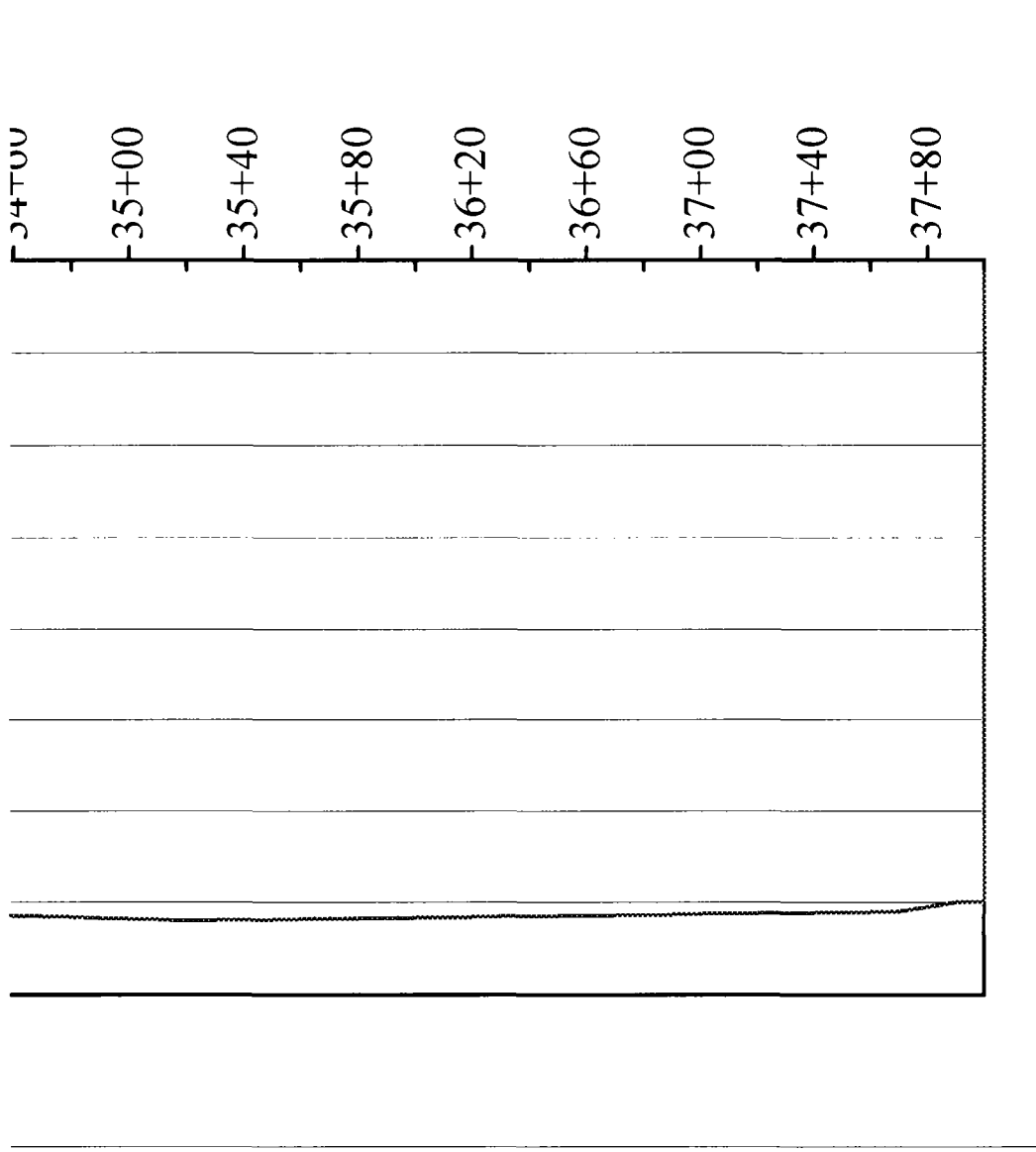


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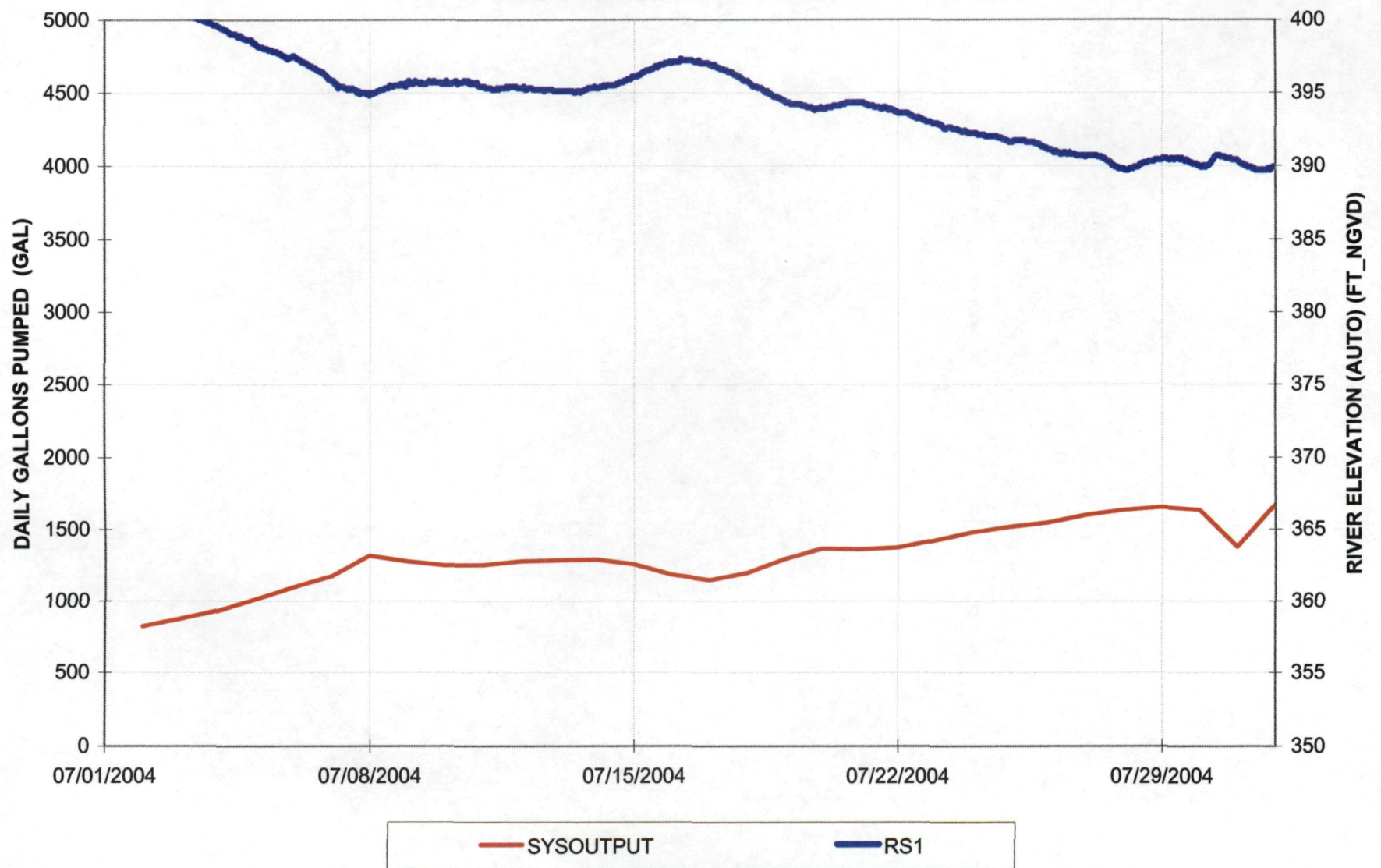
Est. Bedrock Elevation



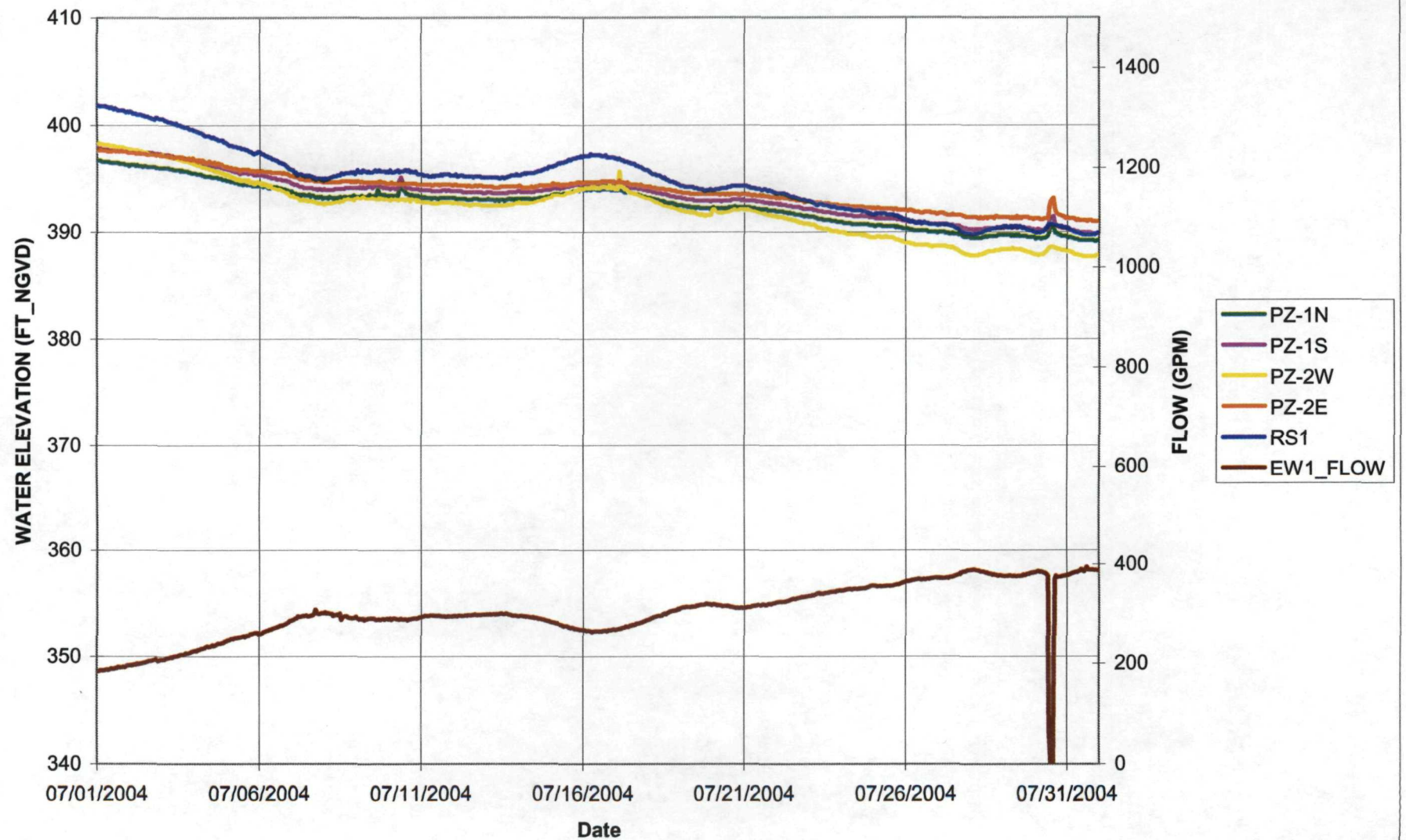


## **PUMPING**

DAILY TOTAL GALLONS PUMPED W/ RIVER STAGE VS TIME

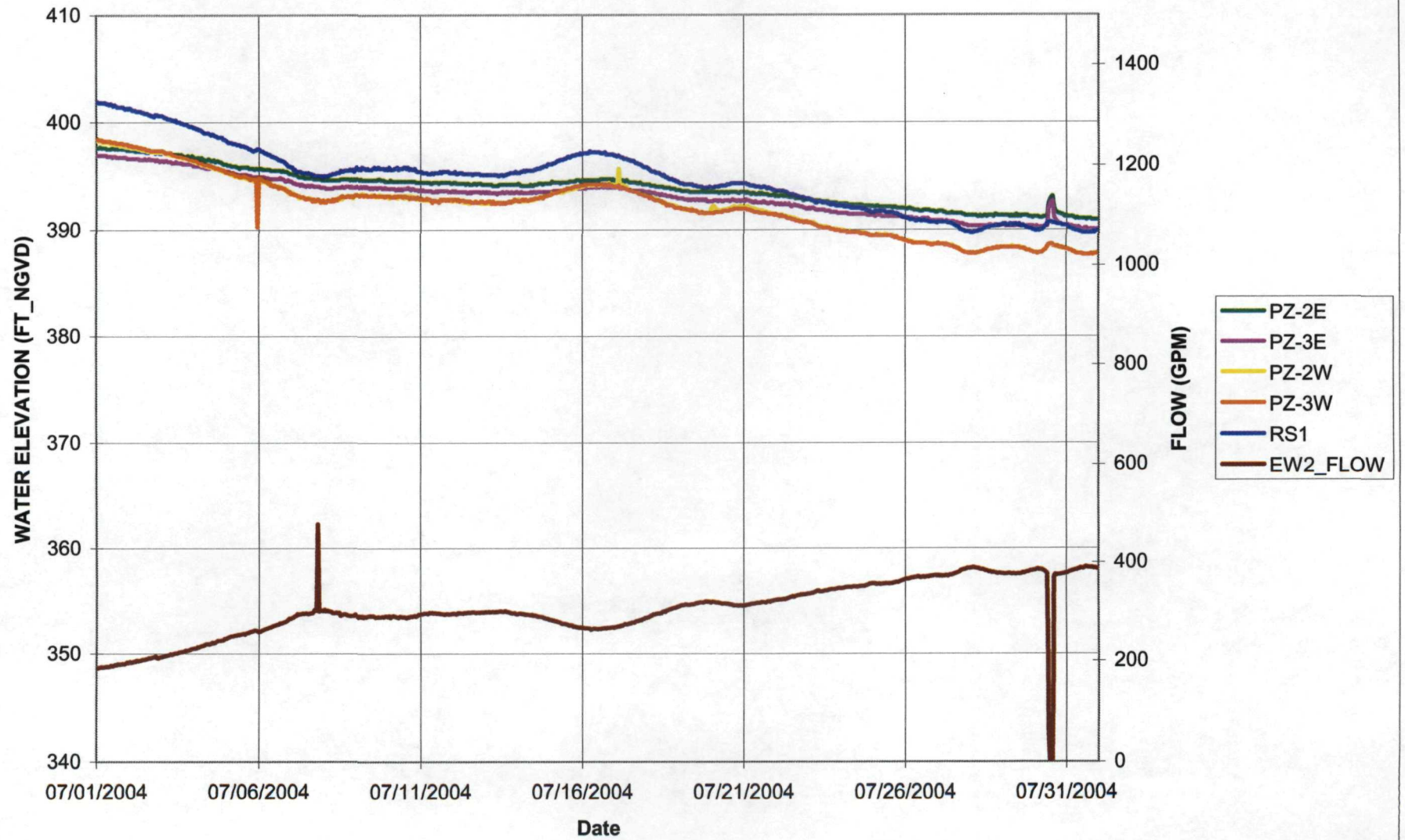


# WATER ELEVATION AND FLOW PLOT





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